

2015-10-24 14:29:00

10/066247

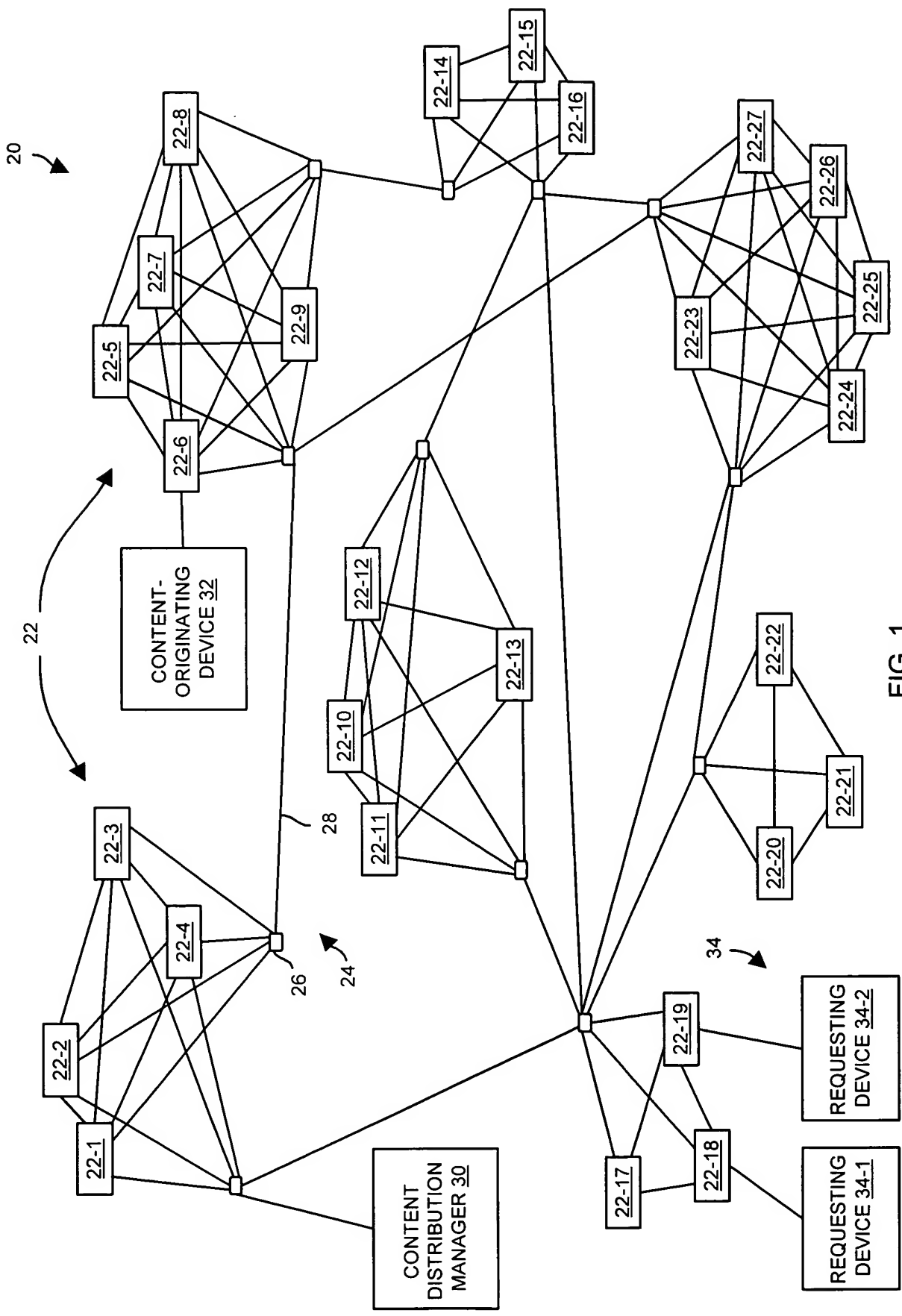


FIG. 1  
(PRIOR ART)

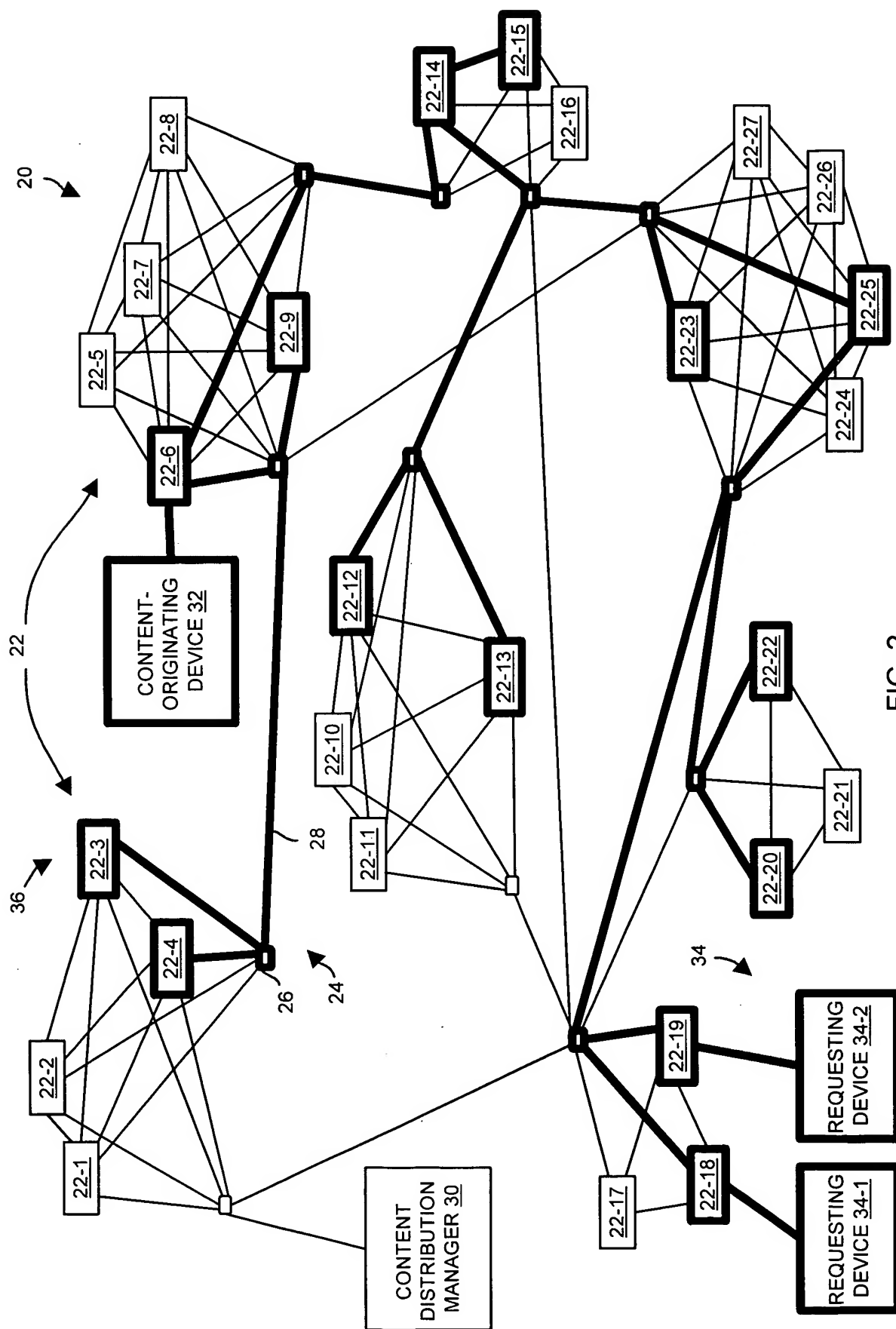


FIG. 2  
(PRIOR ART)

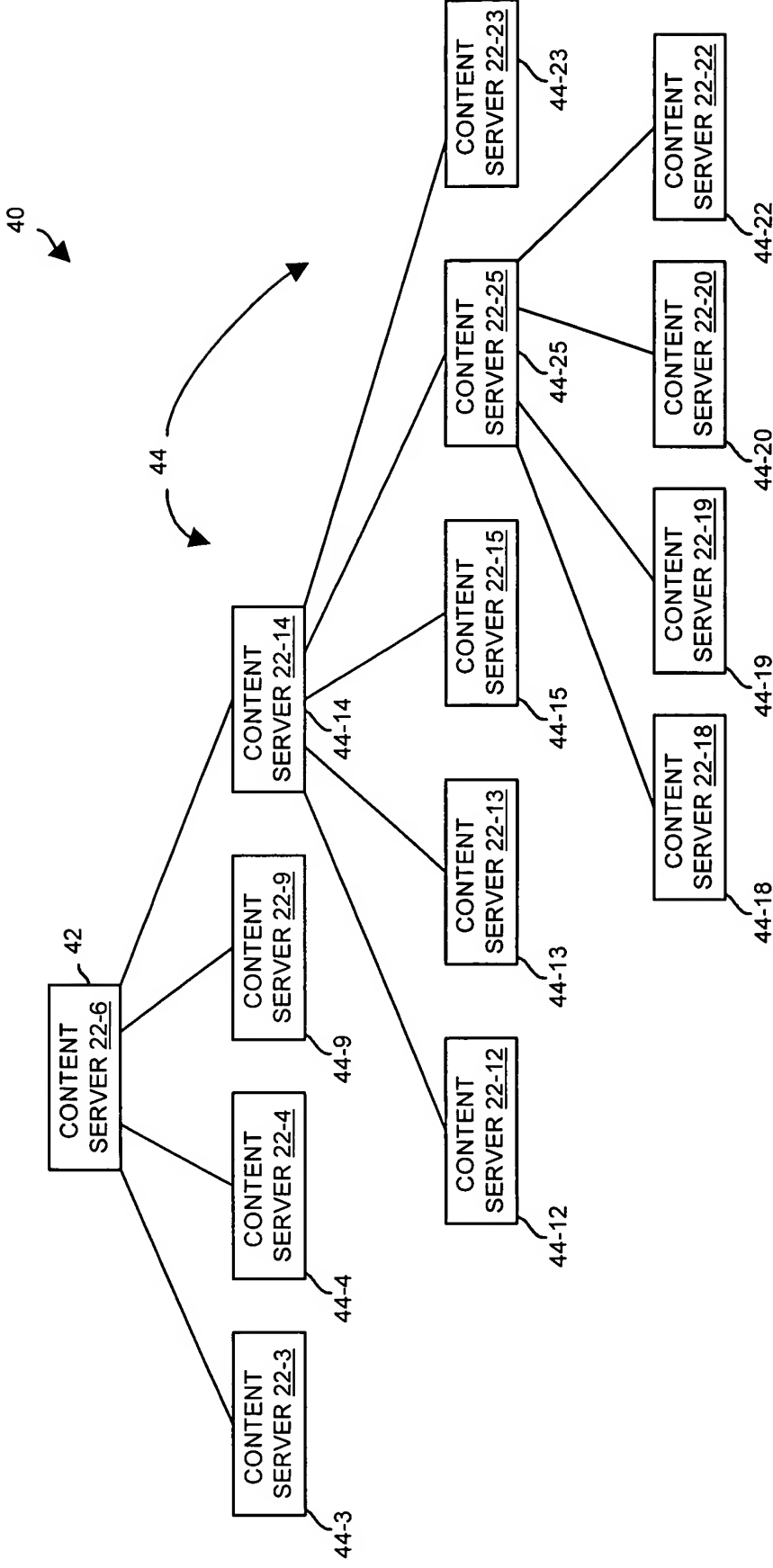


FIG. 3  
(PRIOR ART)

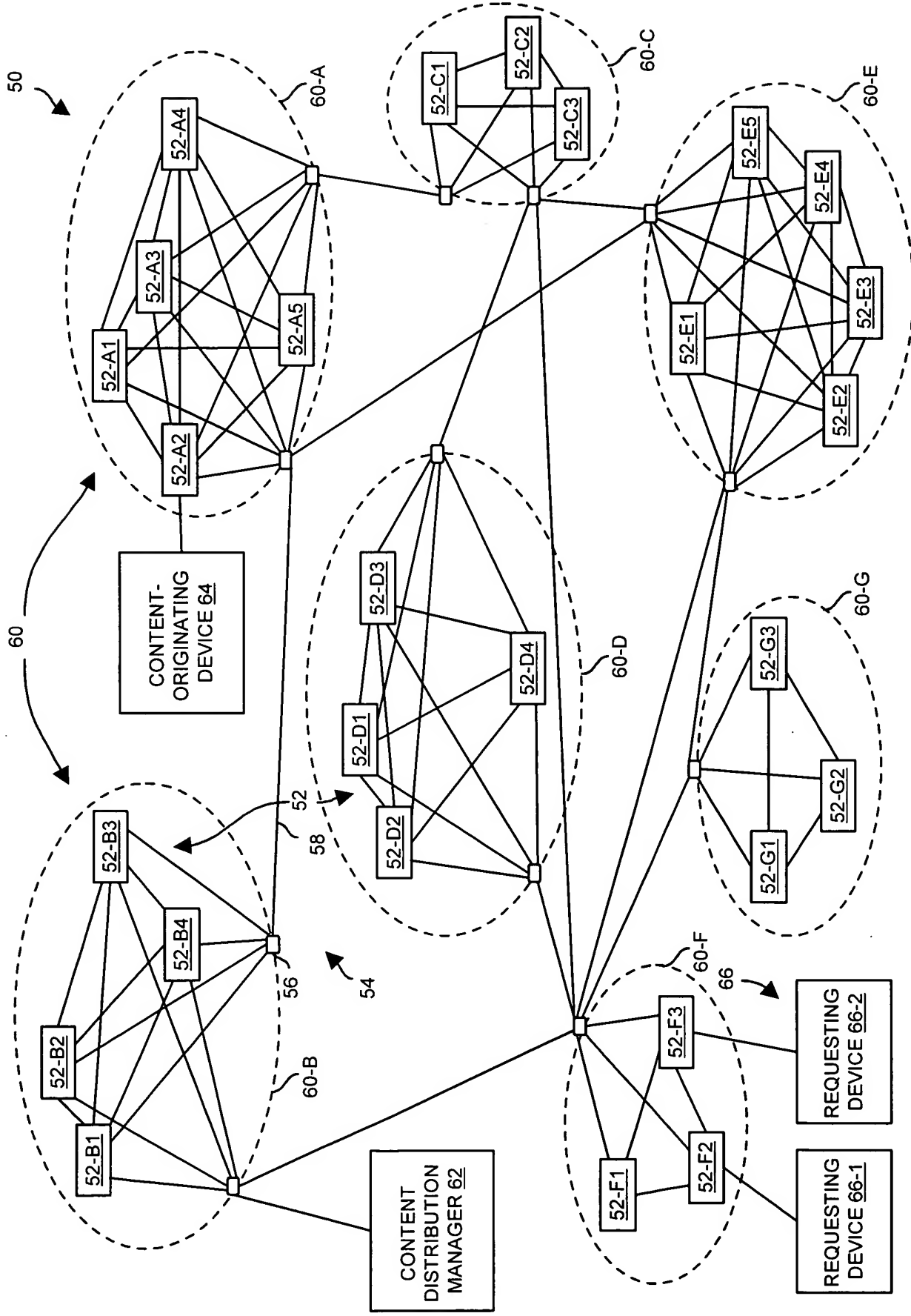


FIG. 4

TO OTHER DEVICES

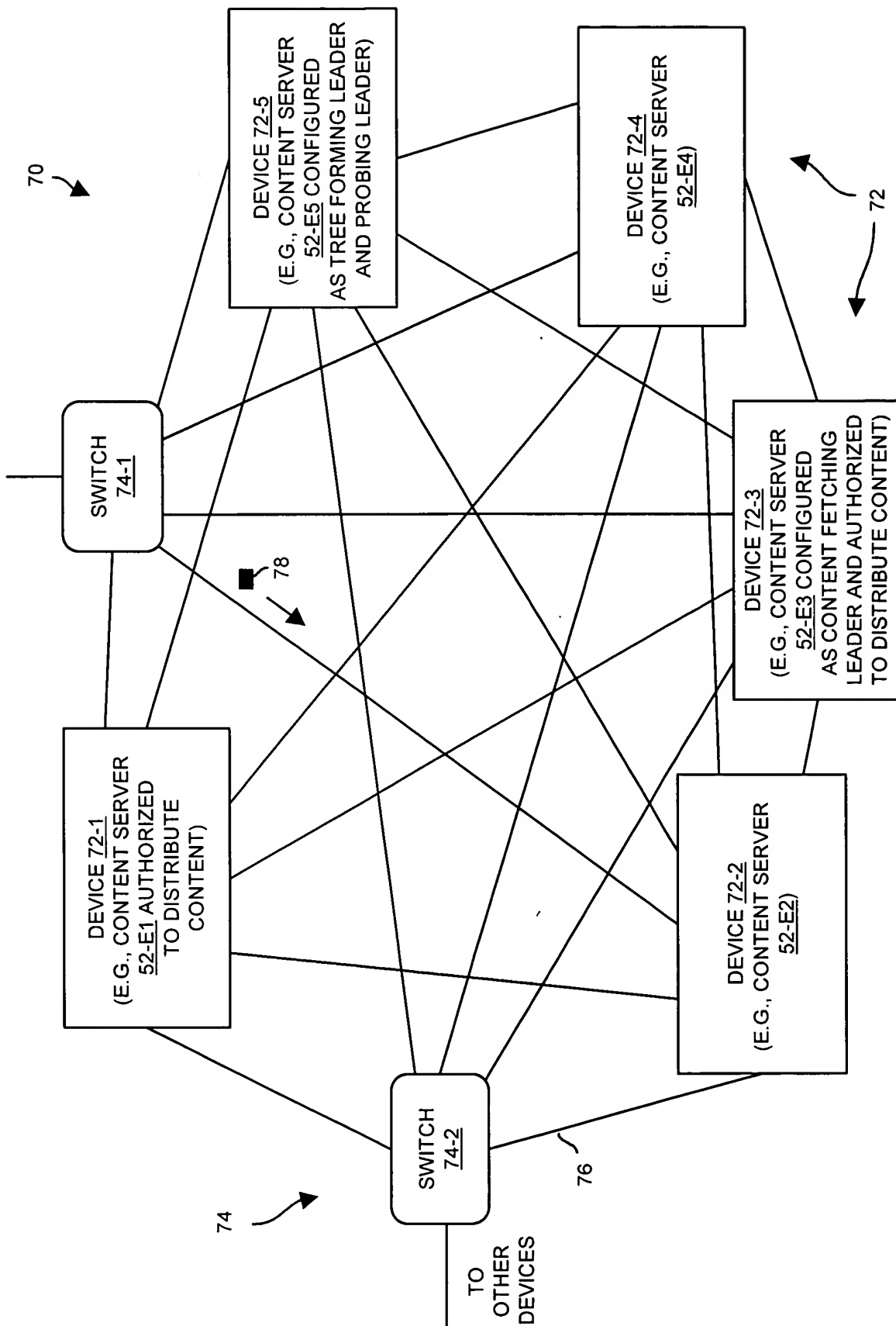


FIG. 5

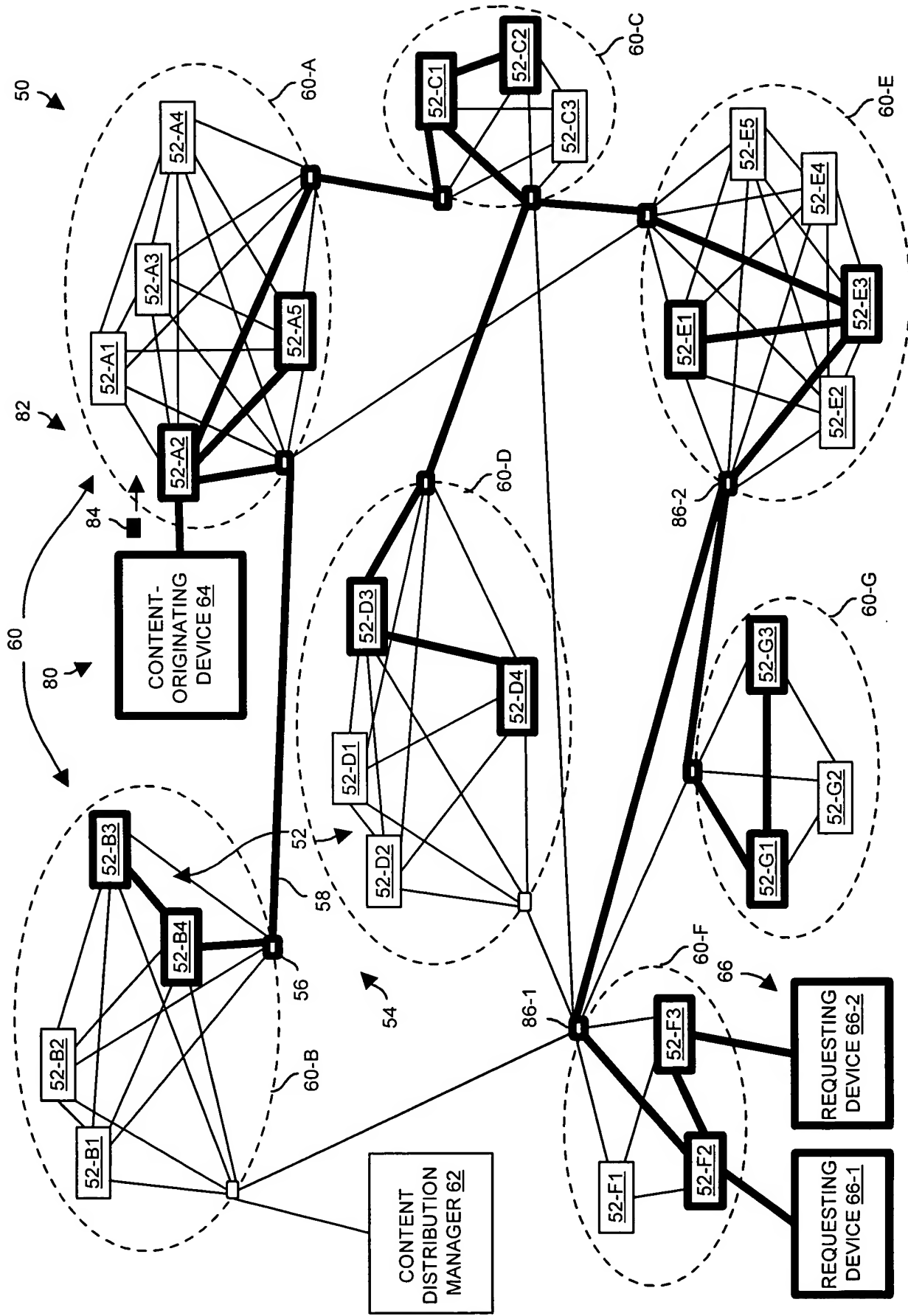


FIG. 6

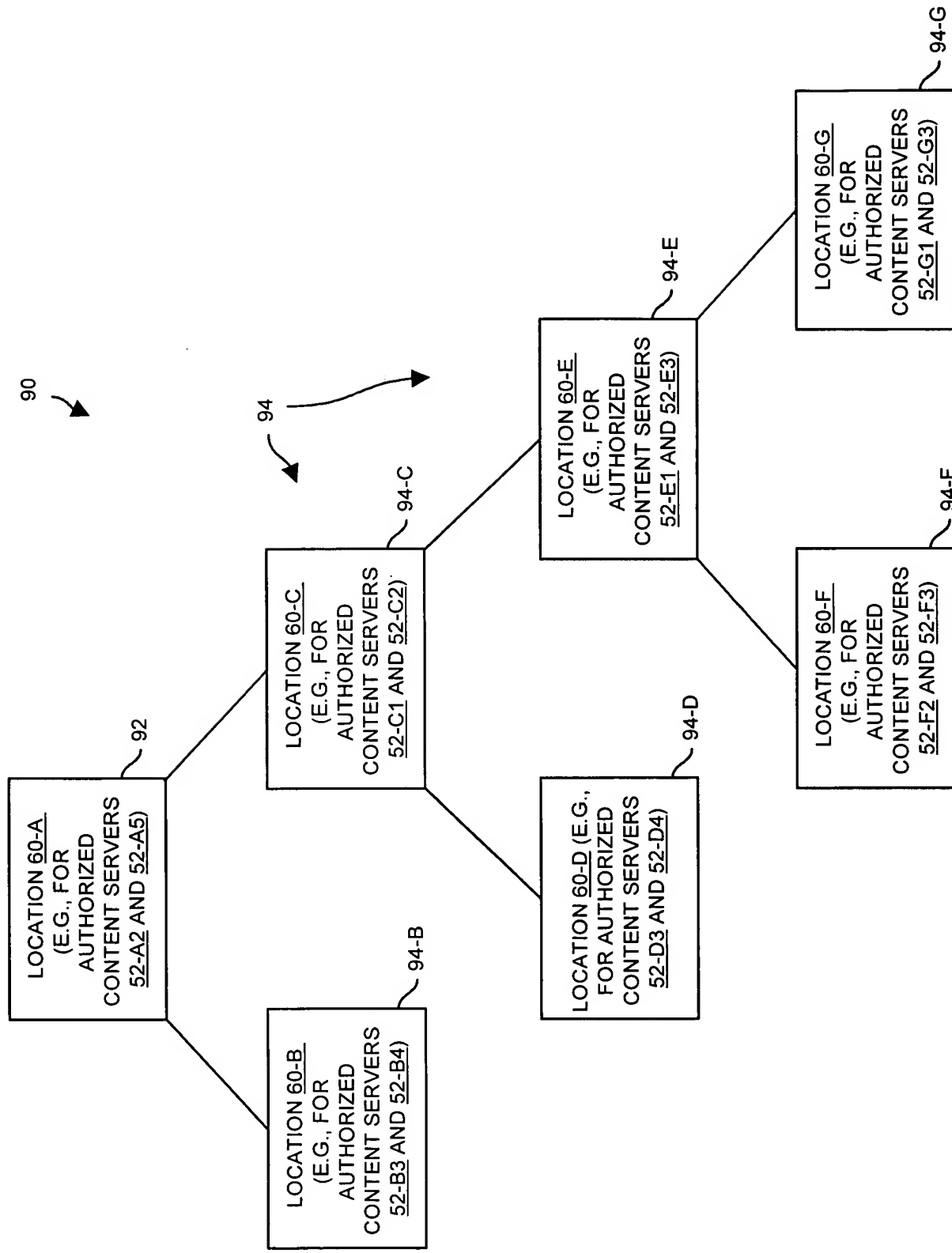


FIG. 7

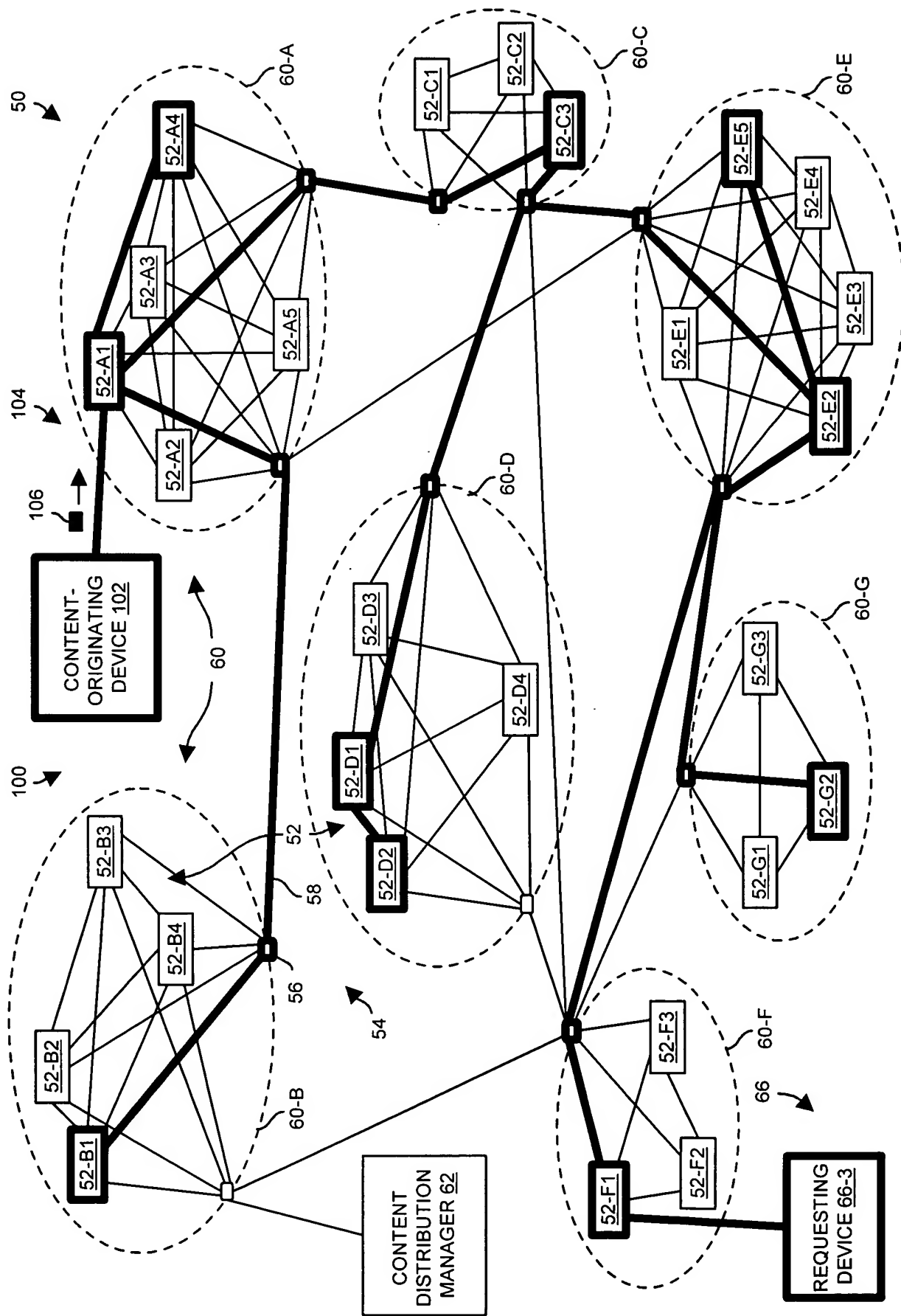


FIG. 8



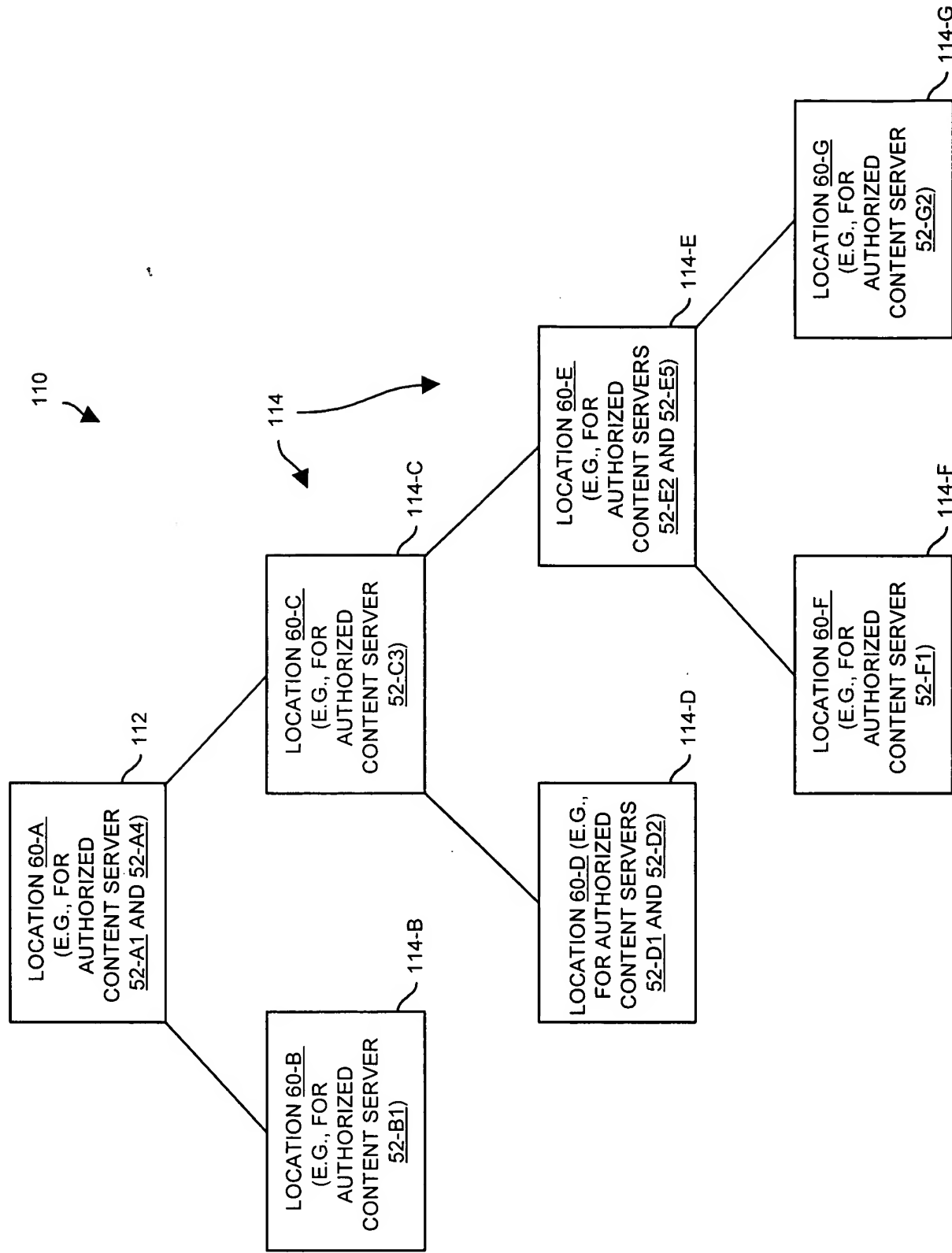


FIG. 9

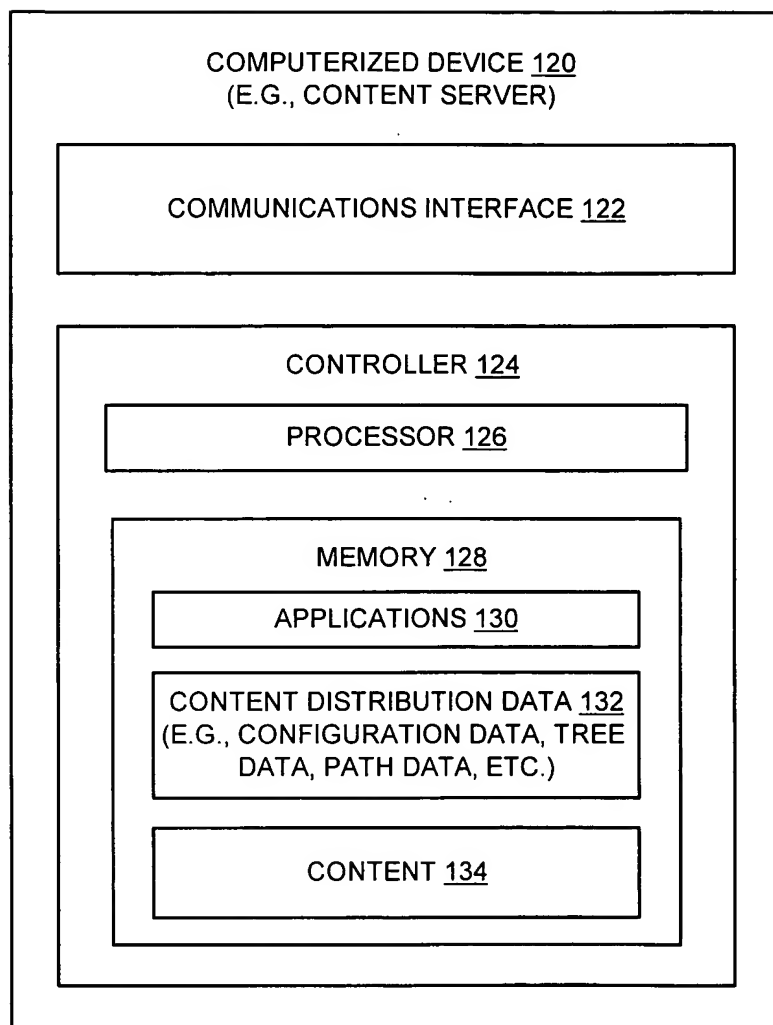


FIG. 10

140

144

146

148

HOST DOMAIN	AUTHORIZED CONTENT SERVERS	TREE
WWW.HD-1.COM	CONTENT SERVERS 52-A2, 52-A5, 52-B3, 52-B4, 52-C1, 52-C2, 52-D3, 52-D4, 52-E1, 52-E3, 52-F2, 52-F3, 52-G1, 52-G3	23
WWW.HD-2.COM	CONTENT SERVERS 52-A1, 52-A4, 52-B1, 52-C3, 52-D1, 52-D2, 52-E2, 52-E5, 52-F1, 52-G2	23
WWW.HD-3.COM	CONTENT SERVERS 52-A3, 52-B2, 52-B3, 52-F1, 52-F2, 52-F3, 52-C1, 52-E3, 52-E5	17
142 .	.	
.	.	
.	.	

FIG. 11

150



CONFIGURATION DATA 152

TREE FORMING LEADER 156 = (YES/NO)

CONTENT FETCHING LEADER 158 = (YES/NO)

PROBING LEADER 160 = (YES/NO)

AUTHORIZED HOST DOMAINS 161

LOCATION DATA 154

LOCATION IDENTIFIER 162 = (LOCATION ID)

DEVICE IDENTIFIER 164 = (DEVICE ID)

CONSTRAINTS 166 = (E.G., LEAF ONLY,  
ANCESTOR OF  
DEVICE X ONLY,  
ETC.)

•  
•  
•

FIG. 12

170



CONFIGURATION DATA 152

TREE FORMING LEADER 156 = "YES"

CONTENT FETCHING LEADER 158 = "NO"

PROBING LEADER 160 = "YES"

AUTHORIZED HOST DOMAINS 161 = NONE

LOCATION DATA 154

LOCATION IDENTIFIER 162 = "ID FOR LOCATION 60-E"

DEVICE IDENTIFIER 164 = "ID FOR DEVICE 52-E5"

•  
•  
•

FIG. 13

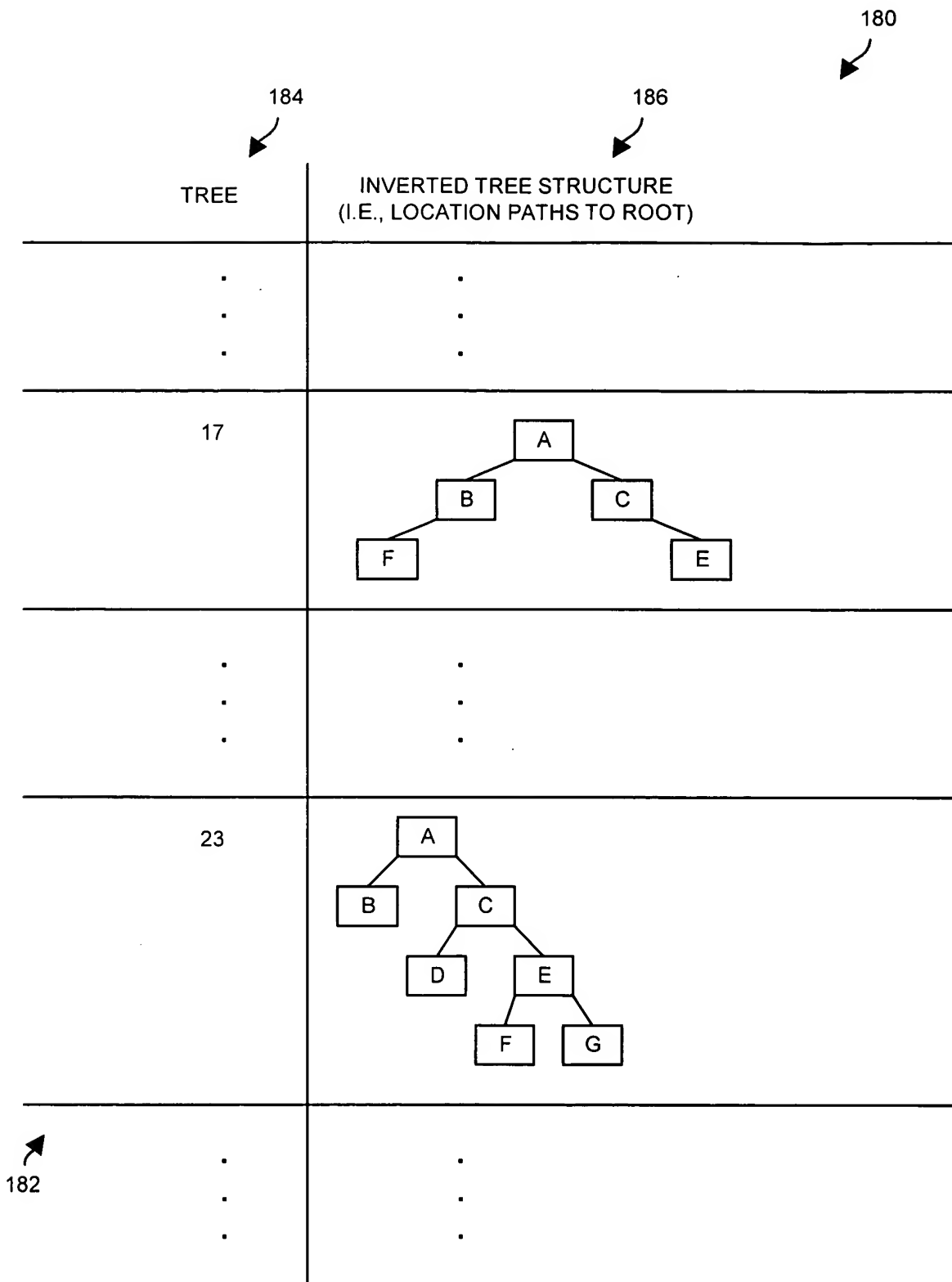


FIG. 14

190



CONFIGURATION DATA 152

TREE FORMING LEADER 156 = "NO"

CONTENT FETCHING LEADER 158 = "NO"

PROBING LEADER 160 = "NO"

AUTHORIZED HOST DOMAINS 161 = "www.hd-1.com"

LOCATION DATA 154

LOCATION IDENTIFIER 162 = "ID FOR LOCATION E"

DEVICE IDENTIFIER 164 = "ID FOR DEVICE 40-E1"

•  
•  
•

FIG. 15

2016-07-01 10:00:00

TO OTHER DEVICES

70

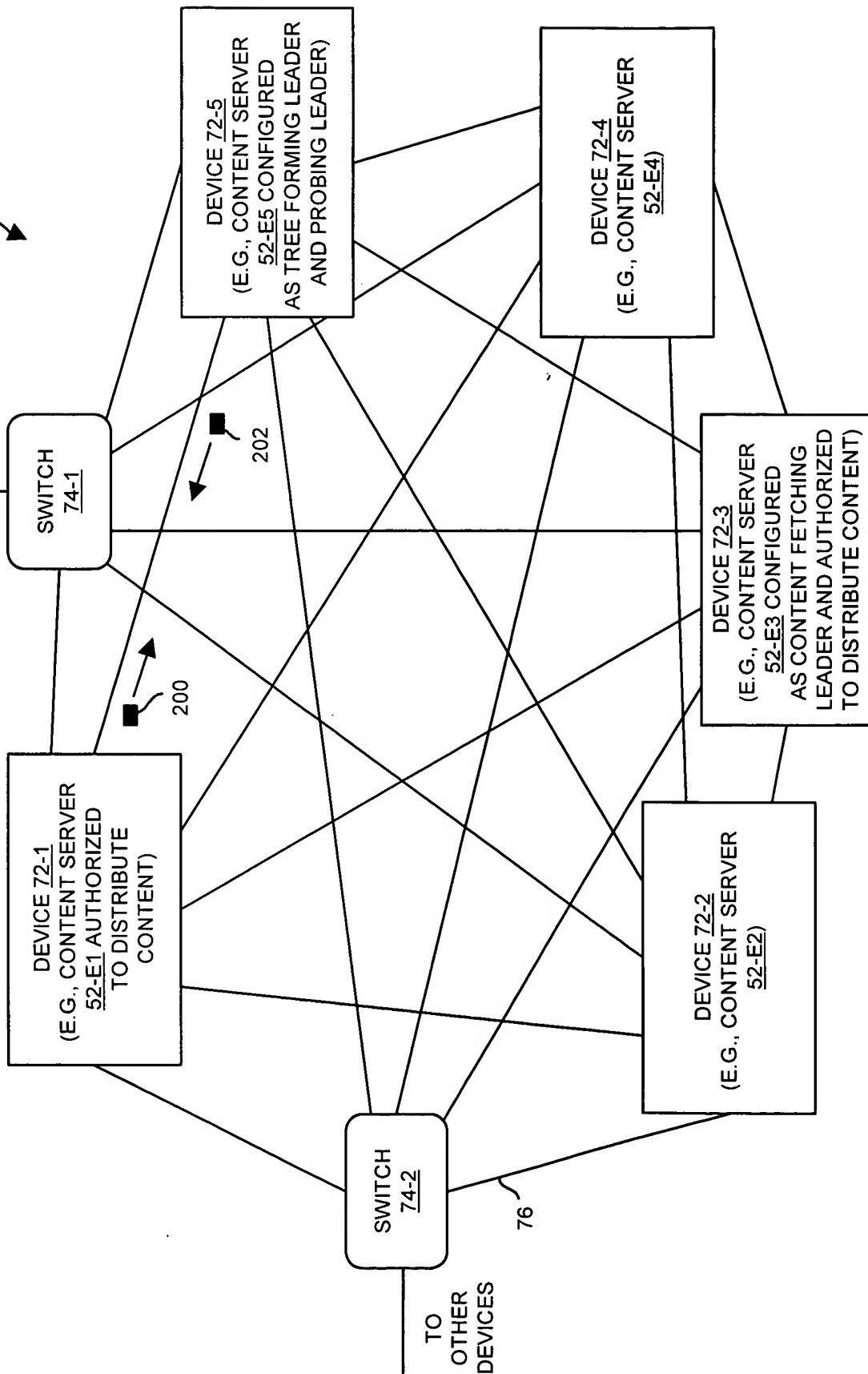


FIG. 16



210



CONFIGURATION DATA 152

TREE FORMING LEADER 156 = "NO"

CONTENT FETCHING LEADER 158 = "YES - www.hd-1.com"

PROBING LEADER 160 = "NO"

AUTHORIZED HOST DOMAINS = "www.hd-1.com"

LOCATION DATA 154

LOCATION IDENTIFIER 162 = "ID FOR LOCATION E"

DEVICE IDENTIFIER 164 = "ID FOR DEVICE 40-E3"

•  
•  
•

FIG. 17

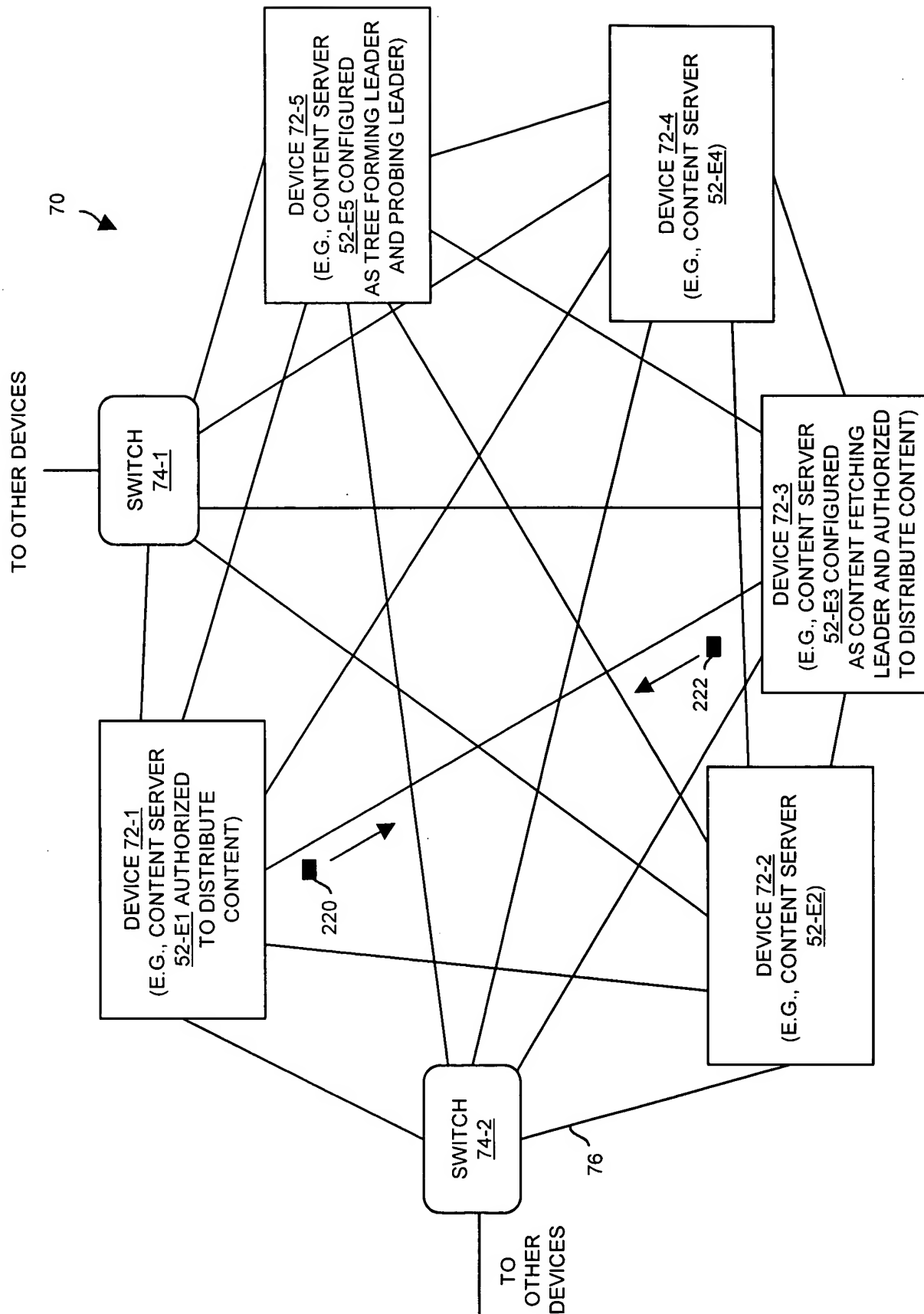


FIG. 18

FIG. 19

230		
234	236	238
AUTHORIZED HOST DOMAINS	AUTHORIZED SERVERS AT CURRENT LOCATION IN DEVICE PRIORITY	TREE
WWW.HD-1.COM	CONTENT SERVER <u>52-E3</u> , CONTENT SERVER <u>52-E1</u> , CONTENT SERVER <u>52-E4</u>	23
WWW.HD-2.COM	CONTENT SERVER <u>52-E2</u> , CONTENT SERVER <u>52-E5</u>	23
WWW.HD-3.COM	CONTENT SERVER <u>52-E3</u> , CONTENT SERVER <u>52-E5</u>	17
232		
.	.	.
.	.	.
.	.	.

FIG. 19

FIG. 20

240		
234 AUTHORIZED HOST DOMAINS	236 AUTHORIZED SERVERS AT ALL LOCATIONS IN DEVICE PRIORITY	238 TREE
WWW.HD-1.COM	CONTENT SERVER <u>52-E3</u> , CONTENT SERVER <u>52-E1</u> , CONTENT SERVER <u>52-E4</u>	23
WWW.HD-2.COM	CONTENT SERVER <u>52-E2</u> , CONTENT SERVER <u>52-E5</u>	23
WWW.HD-2.COM	CONTENT SERVER <u>52-C3</u>	23
WWW.HD-1.COM	CONTENT SERVER <u>52-C1</u> , CONTENT SERVER <u>52-C2</u>	23
232 .	.	.

FIG. 20

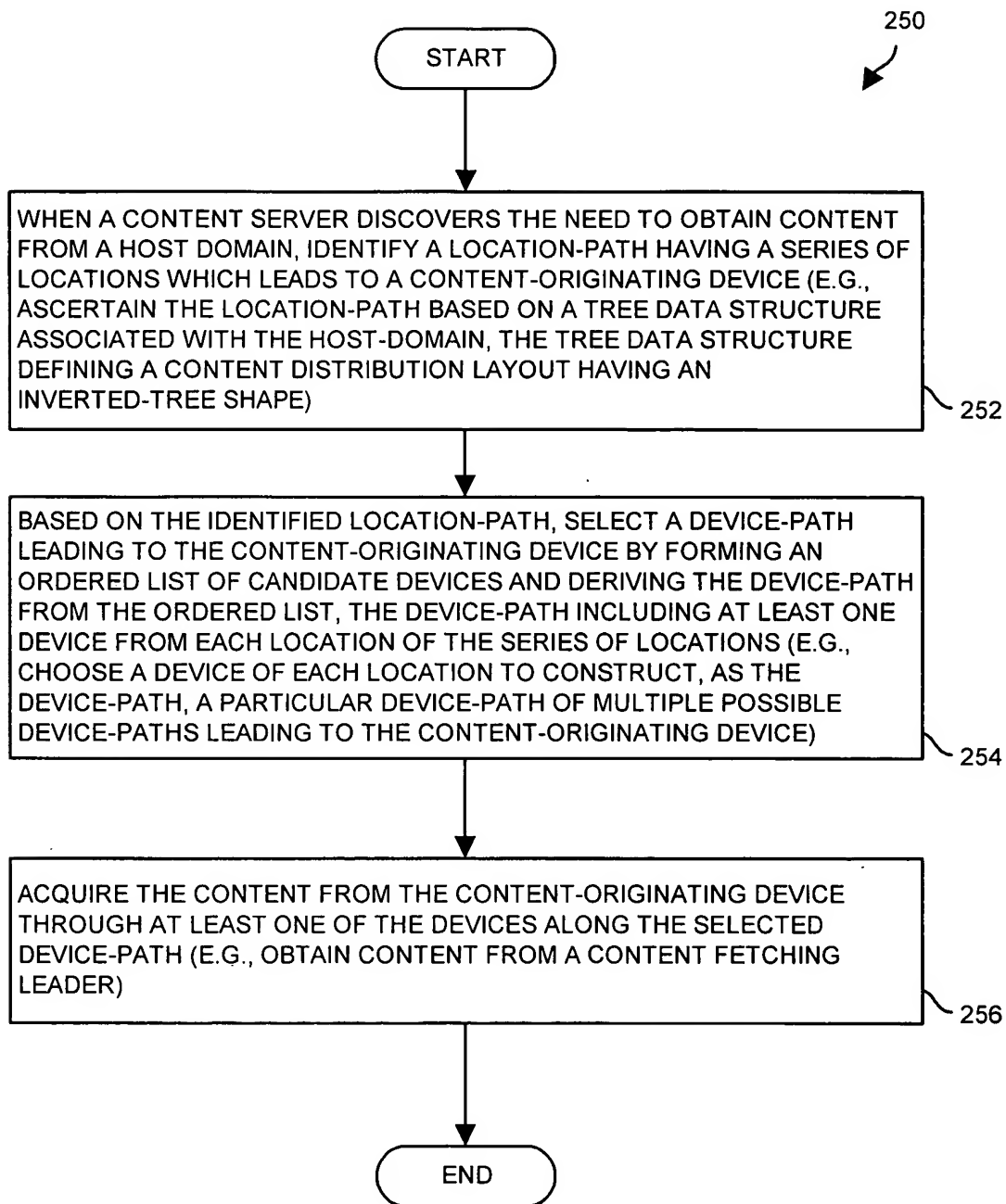


FIG. 21

20251017.013102

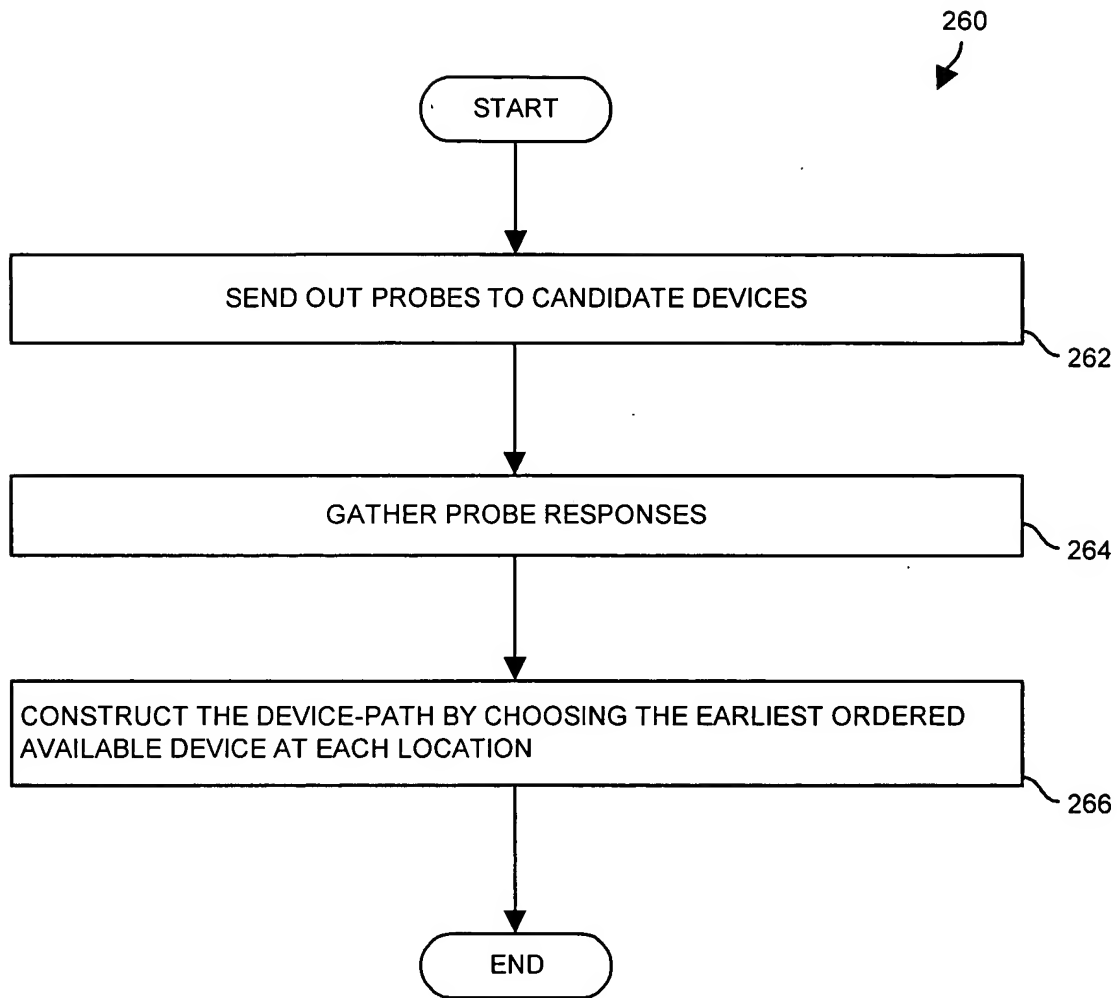


FIG. 22

270

LOCATION-PATH 272  
FROM CURRENT  
DEVICE TO A CONTENT  
ORIGINATING DEVICE

CANDIDATE DEVICES 274 WHICH  
ARE AUTHORIZED TO SERVE CONTENT  
FOR A PARTICULAR HOST DOMAIN  
(E.G., ARRANGED IN A HASHED ORDER)

<LOCATION 60-A>

<CONTENT SERVER 52-A2, CONTENT SERVER 52-A5,  
CONTENT SERVER 52-A3>

<LOCATION 60-C>

<CONTENT SERVER 52-C1, CONTENT SERVER 52-C2,  
CONTENT SERVER 52-C3>

<LOCATION 60-E>

<CONTENT SERVER 52-E3, CONTENT SERVER 52-E1,  
CONTENT SERVER 52-E4>

<LOCATION 60-F>

<CONTENT SERVER 52-F2, CONTENT SERVER 52-F3,  
CONTENT SERVER 52-F1>

ORDERED  
LIST 276 OF  
CANDIDATE  
DEVICES

{ <CONTENT SERVER 52-F3, CONTENT SERVER 52-F2, CONTENT SERVER 52-E3, CONTENT SERVER 52-E1,  
CONTENT SERVER 52-C1, CONTENT SERVER 52-C3, CONTENT SERVER 52-A2, CONTENT SERVER 52-A5>

THE CURRENT CONTENT SERVER 52 IS  
CONSIDERED PART OF THE DEVICE-PATH

DEVICE-PATH  
278

{ <CONTENT SERVER 52-F2, CONTENT SERVER 52-E3, CONTENT SERVER 52-C1, CONTENT SERVER 52-A2>

FIG. 23

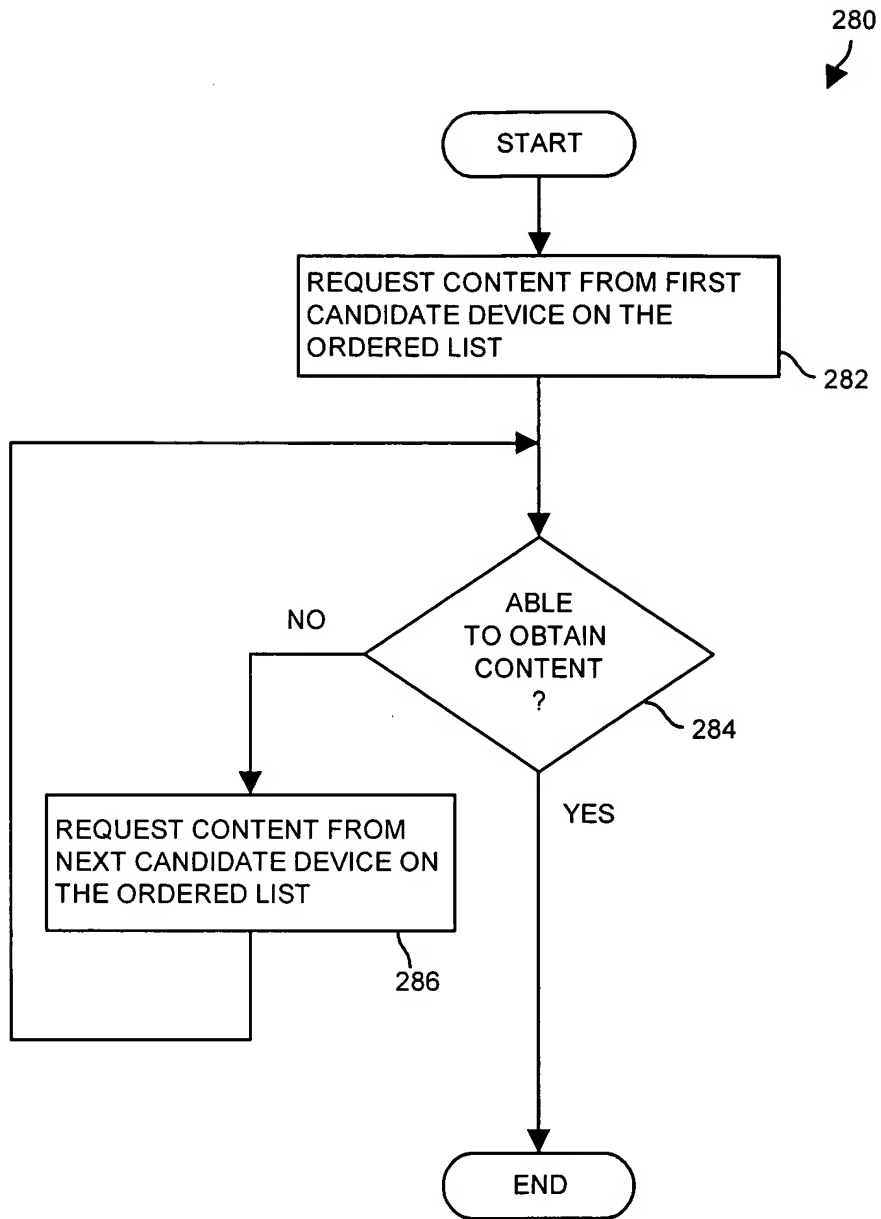


FIG. 24



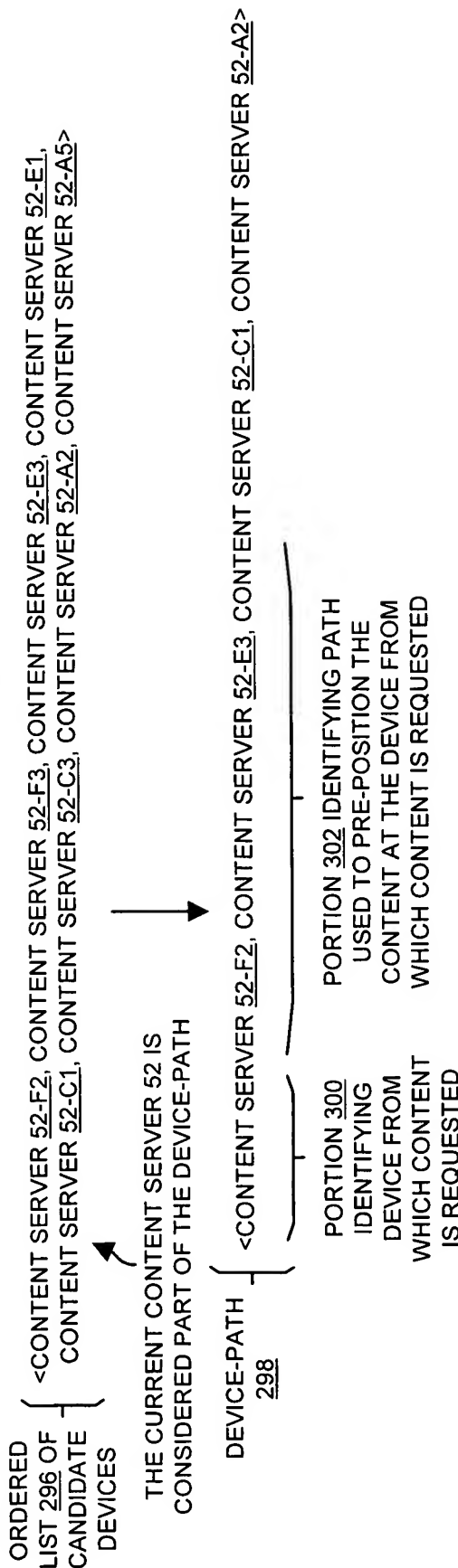
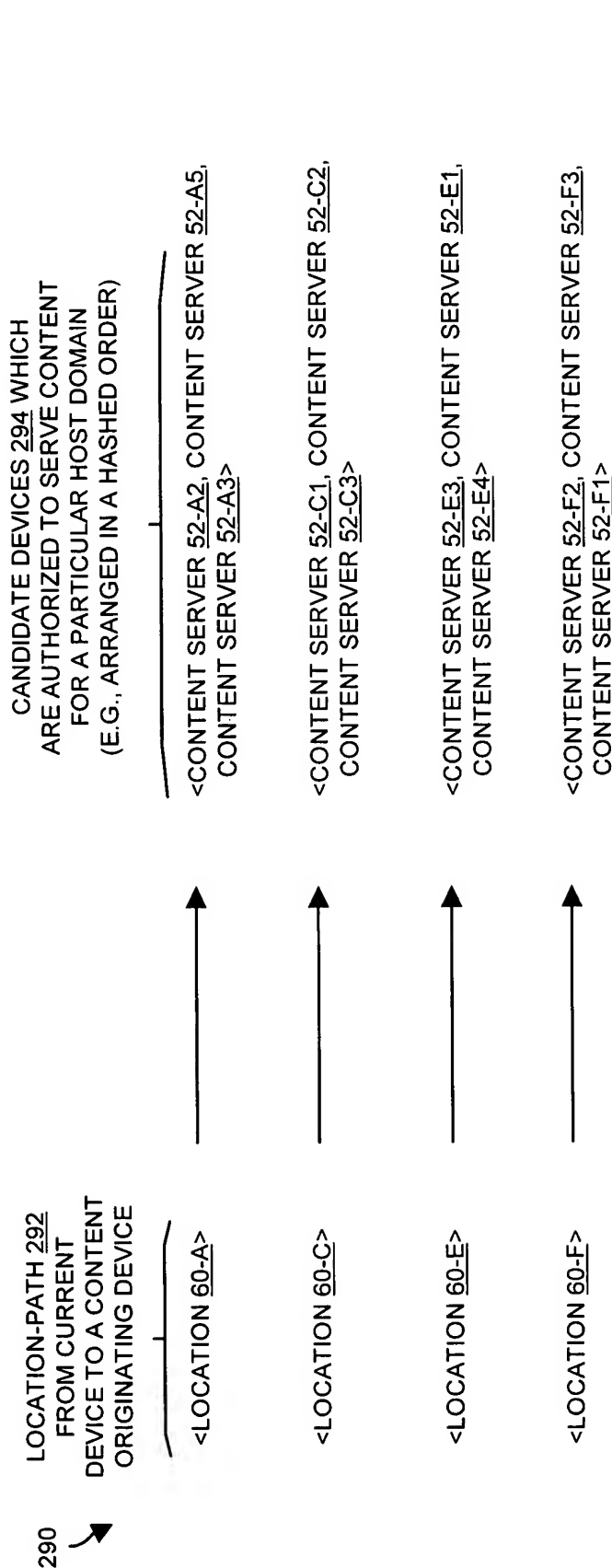


FIG. 25